# UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

MARILYN F. QUIRIN, Special	)	
Representative of the Estate of	)	
RONALD J. QUIRIN, Deceased,	)	
	)	Judge Joan B. Gottschall
Plaintiff,	)	
	)	Case No. 13 C 2633
v.	)	
	)	
LORILLARD TOBACCO COMPANY,	)	
et al.,	)	
	)	
Defendants.	)	

## **MEMORANDUM OPINION & ORDER**

Plaintiff Marilyn F. Quirin, special representative of the estate of Ronald J. Quirin ("Quirin"), has sued defendant Georgia-Pacific LLC on a negligence theory, alleging that Mr. Quirin's mesothelioma was caused by his exposure to asbestos while working as a telephone installer and supervisor. Quirin claims that that, between 1957 and 1977, Mr. Quirin worked near drywall installers who used Georgia-Pacific's drywall joint compound, which contained chrysotile asbestos. Now before the court is Georgia Pacific's motion to exclude expert testimony, work practice studies, and Tyndall lighting videotapes by Quirin's expert Dr. James R. Millette, Ph.D. As Quirin has agreed not to use Dr. Millette's videotapes at trial, that portion of Georgia-Pacific's motion is granted as unopposed. The court holds that the testimony and work practice studies are admissible under Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993), and denies the motion with respect to that evidence.

#### I. LEGAL STANDARD

Under Rule 702, an expert witness, "qualified . . . by knowledge, skill, experience, training, or education," may testify if: "(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702.

A trial judge must ensure "that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert*, 509 U.S. at 597. "To do so, the district court must ascertain whether the expert is qualified, whether his or her methodology is scientifically reliable, and whether the testimony will 'assist the trier of fact to understand the evidence or to determine a fact in issue." *Bielskis v. Louisville Ladder, Inc.*, 663 F.3d 887, 893 (7th Cir. 2011) (quoting Fed. R. Evid. 702). The court must prevent an expert from offering legal conclusions, as "experts cannot make those." *See United States v. Diekhoff*, 535 F.3d 611, 619 (7th Cir. 2008).

"The reliability of the expert's principles and methods can be examined by looking at factors such as (1) whether the scientific theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether a particular technique has a known potential rate of error; and (4) whether the theory or technique is generally accepted in the relevant scientific community." *Schultz v. Akzo Nobel Paints, LLC*, 721 F.3d 426, 431 (7th Cir. 2013) (citing *Daubert*, 509 U.S. at 593-94). The Seventh Circuit has explained that the judge's concern "is not the ultimate correctness of the expert's conclusions. Instead, it is the soundness and care with which the expert arrived at her opinion: the inquiry must 'focus . . . solely on principles and methodology, not on the conclusions they generate."

*Id.* (quoting *Daubert*, 509 U.S. at 595). If the expert's principles and methodology reflect reliable scientific practice, "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596.

#### II. ANALYSIS

Having reviewed the parties' submissions, the court concludes that a *Daubert* hearing on Georgia-Pacific's motion is unnecessary. The court first finds that Dr. Millette is qualified to offer an opinion regarding fiber release from products containing asbestos. Dr. Millette is Executive Director of MVA Scientific Consultants ("MVA"), an independent analytical testing lab and consulting company. He has a Ph.D. in Environmental Science and has been a consulting scientist involved in environmental, particle, and materials studies since 1972, primarily employing microscopic techniques. He spent eleven years as a research scientist with the U.S. Environmental Protection Agency and five years with at McCrone Environmental Services, where he supervised the analysis of particulates using microscopic techniques. Dr. Millette teaches a training course on analyzing samples for asbestos fibers. He has testified in numerous court cases involving fiber release from asbestos-containing products.

The court further concludes that Dr. Millette's "scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue," as required by Rule 702. The issue of whether respirable asbestos fibers released from Georgia-Pacific joint compound were present in the air at Mr. Quirin's worksites in sufficient quantities to constitute a cause of his mesothelioma is critical to Quirin's case. Lay persons will be unable to resolve this issue without scientific evidence.

The court next turns to the question of whether Dr. Millette's reports and testimony are based on reliable methodology.

### A. Dr. Millette's Expert Report

Dr. Millette's expert report includes several opinions related to Georgia-Pacific joint compound. It states that the joint compound contained approximately eight percent asbestos, as measured by his laboratory. It further states that by "working around drywall workers who mixed, sanded and cleaned-up joint compound," Mr. Quirin "was exposed to respirable asbestos fibers." (Pl.'s Expert Reports Ex. 4 (Millette Report) 8, ECF No. 82-4.) Dr. Millette further explained,

The concentrations of asbestos from drywall joint compound to which Mr. Quirin was exposed varied depending primarily on the specific activity the drywallers were performing and the distance Mr. Quirin was from the activity. It is my opinion that Mr. Quirin would have been exposed to asbestos from drywall joint compound activities in the ranges shown in Table 2.

(*Id*.)

Table 2 is entitled, "Comparison of Drywall Joint Compound Studies." It includes estimates of the number of asbestos fibers per cubic centimeter to which a person would be exposed at various distances from three activities performed by drywallers: dry mixing, sanding, and sweeping. (*Id.* at 11.) The sources of the estimates given in the table are listed. They include three studies conducted by researchers other than Dr. Millette between 1973 and 1980, and a study conducted in 2009 by MVA. (*Id.*)

Dr. Millette's expert report also states,

It is my further opinion that direct exposure (performing the work oneself) and indirect exposure (in the close proximity to others performing work) can result in substantially similar exposures, particularly within enclosed areas. In the absence of measured values at specific distances, it is my opinion that the "rule of thumb" determined by Donovan, 2011 is useful for approximating exposures; namely: for persons in the range of 1-5 feet from the source, airborne asbestos concentrations

can be roughly approximated at 50% of the source concentration; 35% at >5-10 feet, 10% for >10-30 feet, and less than 1% at distances greater than 30 feet. A copy of the Donovan article is attached in Attachment 6.

(*Id.* at 8.)

## B. Georgia-Pacific's Challenges to the 2009 MVA Work Practice Study

The major focus of Georgia-Pacific's motion is a report by MVA dated August 19, 2009, entitled "Fiber Release During the Mixing, Application, and Sanding of Bondex." (Defs.' Mot. to Exclude Ex. H (MVA 7885 Report), ECF No. 105-8.) The report details a study conducted by MVA on Bondex joint compound.

According to the report, the study was conducted as follows. The testing was performed in a specially built test chamber measuring 9 x 10 x 12 feet that had been cleaned with a HEPA air filter. No asbestos was detected in the chamber before the testing began or in the sheetrock and joint tape used in the study. Bondex joint compound was mixed according to the instructions on the box. The product was applied over a seam between two pieces of sheetrock, allowed to dry, and then sanded. (*Id.* at 3.) Air samples were taken during mixing and sanding in two locations: in the "breathing zone of the worker" and from approximately five feet away (the "area" sample). The air samples were analyzed using phase contrast microscopy NIOSH Method 7400 and transmission electron microscopy NIOSH Method 7402 procedures, and by transmission electron microscopy using the EPA AHERA method. (*Id.* at 2.)

Georgia-Pacific raises several objections to the work practice study. First, it points out differences between the test conditions and the conditions of Mr. Quirin's alleged exposure. Most obvious is that Dr. Millette used Bondex, not Georgia-Pacific joint compound. The court finds that this is not enough in itself to render the study irrelevant and unreliable, however. Dr. Millette explained that the percentage asbestos content of Bondex and Georgia-Pacific joint

compound is similar (actually the percentage of asbestos in Bondex was lower), and there is no apparent reason why the joint compounds would perform differently with respect to fiber release. Georgia-Pacific identifies no such differences in performance. Moreover, Georgia-Pacific has the information it needs to identify any differences between Bondex and Georgia-Pacific joint compound that could affect the relevance of the study results and may bring those out on cross-examination or through its own witnesses.

Second, Georgia-Pacific notes that the room was hermetically-sealed, unlike the work sites on which Mr. Quirin worked. The court views this as an inevitable limitation of Dr. Millette's study, because the only way to clean the air to ensure accurate test results was to seal the test chamber. The fact that the actual work sites where Mr. Quirin was allegedly exposed varied in size and air flow, and the possible effect this could have had on asbestos fiber concentrations in the air, may be brought out on cross-examination.

As to the actual practices tested, Georgia-Pacific makes no argument that the mixing, sanding, and sweeping were not similar to the work performed by drywallers in alleged proximity to Mr. Quirin. The court concludes that the work practice study reliably simulated that activity. In sum, the dissimilarities between the testing chamber and the actual working conditions go to the weight of the evidence, not its admissibility. *See Lipson v. On Marine Servs. Co.*, No. C13-1747 TSZ, 2013 WL 6536923, at \*2 (W.D. Wash Dec. 13, 2013) (concluding that Tyndall lighting demonstrations were admissible). Of course, any differences in the study and the actual conditions under consideration must be acknowledged by Dr. Millette and cannot be used in a way that misleads the jury.

Georgia-Pacific also raises arguments as to the methods used by Dr. Millette to collect air samples for testing. But these arguments misstate the cases on which Georgia-Pacific relies and

reflect a lack of understanding of how the sampling was performed in MVA's study. For example, Georgia-Pacific cites to testimony by Dr. William Longo that "indirect TEM is not recognized by OSHA as an acceptable process for determining fiber release." (Mot. to Exclude 8.) But in the testimony cited, Dr. Longo actually states: "OSHA does not accept TEM analysis unless it is the 7402." (Mot. to Exclude Ex. I (Longo Dep.) 65:6-7.) The sampling method reported in MVA's 2009 study was "transmission electron microscopy NIOSH Method 7402." Thus, Georgia-Pacific's own exhibit supports the use of Dr. Millette's sampling method.

Equally egregious is Georgia-Pacific's cite to *In re Armstrong World Industries, Inc.*, No. 00-04471, at \*8 (Bankr. D. Del. 2002). (*See* Mot. to Exclude Ex. J.) In that case, Dr. Millette's testimony was barred because it relied on an indirect method of sampling *floor* dust for asbestos. In concluding that the method in the study at issue was unreliable, the court stated, "[T]he direct air sampling method for testing airborne asbestos" is "the best we have." (*Id.* at 2-3.) That air sampling method is the method used in MVA's 2009 study. Thus, again, Georgia-Pacific's own exhibit supports the reliability of the methodology used in the MVA study.

Georgia-Pacific further argues that the study is not peer-reviewed and was created for the purposes of litigation. The absence of peer review and the preparation of a report for the purposes of offering expert testimony are factors that courts consider in evaluating the reliability of expert testimony. *Am. Honda Motor Co. v. Allen*, 600 F.3d 813, 817 (7th Cir. 2010). But those factors are not dispositive, and the court concludes that because the techniques used by Dr. Millette are replicable, the report clearly describes the methods employed in the study, and the sampling methods are accepted, the study is admissible under Rule 702 and *Daubert*.

C. Georgia-Pacific's Challenges to Dr. Millette's Testimony

Georgia-Pacific argues that Dr. Millette has no factual basis to offer an opinion regarding

Mr. Quirin's risk of disease from exposure to joint compound and that he cannot quantify Mr.

Quirin's exposure. The court finds no such opinions in his expert report. The report is limited to

estimates of exposure to airborne asbestos fibers at various distances from joint-compound-

related activities. Based on these estimates, Dr. Millette will testify as to what type of exposure

Mr. Quirin could have had under different assumed conditions. As long as these opinions are

grounded in Dr. Millette's own studies and relevant research he has reviewed, and as long as Dr.

Millette does not speculate about facts with which he is unfamiliar, such as the frequency and

duration of exposure Mr. Quirin actually experienced, the testimony is admissible.

III. CONCLUSION

Georgia-Pacific's motion to exclude the testimony, work practice studies, and Tyndall

lighting videotapes of Dr. Millette is granted in part and denied in part. The motion is granted

as to the Tyndall lighting videotapes and denied as to the work practice studies and testimony.

ENTER:

JOAN B. GOTTSCHALL

United States District Judge

DATED: March 7, 2014

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